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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/069,568	07/03/2002	Rainer Haeberer	R.37284	1830	
2119 75	90 04/13/2004		EXAMINER		
RONALD E. C		KIM, CHRISTOPHER S			
GREIGG & GREIGG P.L.L.C. 1423 POWHATAN STREET, UNIT ONE ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER	
			3752	\sim	
			DATE MAILED: 04/13/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

1) ⊠ Responsive to communication(s) filed on 27 February 2002. 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final. 3) ☑ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) ☑ Claim(s) 13-32 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) is/are rejected. 7) ☑ Claim(s) 13-32 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.				107			
Examiner		Application No.	Applicant(s)				
Christopher S. Kim 3752 Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILLING DATE OF THIS COMMUNICATION. Extensive or time may be a evaluation of the production of the period for reply specified above is less than this (20) days, employed in the standary minimum of thin) (30) days will be considered time). If the period for reply a specified above is less than thiny (20) days, employed minimum of thin) (30) days will be considered time). If the period for reply a specified above is less than thiny (20) days, employed minimum of thin) (30) days will be considered time). If the period for reply a specified above is less than thiny (20) days, employed minimum of thin) (30) days will be considered time). If the period for reply a specified above is less than thiny (20) days, employed minimum of thin) (30) days will be considered time). If the period for reply a specified above is less than thiny (20) days, employed will have a considered time). If the period for reply a specified above is less than thiny (20) days, employed will have a considered time). If the period for reply a specified above is less than thiny (20) days, employed will have a considered time). If the period for reply a specified above is less than thiny (20) days, employed and the specified and th		10/069,568	HAEBERER ET A	۱L.			
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a) ☐ All b) ☐ Some * c) ☒ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Priority under 35 U.S.C. § 119						
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3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)	· · · · · · · · · · · · · · · · · · ·						
	3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) Notice of Informal P		O-152)			

Application/Control Number: 10/069,568

Art Unit: 3752

DETAILED ACTION

1. This application is in condition for allowance except for the following formal matters:

In claim 13, lines 11-12, "adjoining the first conical face (30) toward the combustion chamber, is embodied," should read --the second conical face (32) chamber adjoining the first conical face (30), the second conical face (32) downstream of the first conical face (30),--;

in claim 13, line 15, "of which" should read --of the annular groove (35)--; and in claim 13, line 17, "whose second groove edge (39)" should read --the second groove edge (39) of the annular groove (35)--.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "additional annular groove (47) at least partly covering the injection ports (11) both in the closing position and in the open position of the valve member (5)" recited in claim 13 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Prosecution on the merits is closed in accordance with the practice under *Ex* parte Quayle, 1935 C.D. 11, 453 O.G. 213.

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A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Danckert et al.; Golv et al.; Stevens; Fath et al.; Boecking and Ricco disclose fuel injector need tips having grooves.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (703) 308-8336. The examiner can normally be reached on Monday - Thursday, 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Y. Mar can be reached on (703) 308-2087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher S. Kim Primary Examiner Art Unit 3752 Page 3